

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-21 (Cancelled)

22. (New) A method for improving plant growth characteristics, comprising increasing, in a monocotyledonous plant, expression of a nucleic acid encoding an NHX protein and/or increasing activity of an NHX protein, wherein said plant is grown under non-salt stress conditions.

23. (New) The method according to claim 22, wherein said increasing expression and/or increasing activity is affected by introducing and expressing in a plant a nucleic acid encoding an NHX protein or a homologue, derivative or active fragment thereof.

24. (New) The method according to claim 22, wherein said growth characteristic is increased yield/biomass and/or modified plant architecture.

25. (New) The method according to claim 24, wherein said increased yield/biomass and/or modified plant architecture is selected from the group consisting of: increased aboveground area, increased number of first panicles, increased plant height, increased total number of seeds, increased number of filled seeds, increased total seed weight, increased harvest index and increased thousand kernel weight, each relative to corresponding wild type plants grown under non-salt stress conditions.

26. (New) The method according to claim 22, wherein said nucleic acid is in the sense orientation and is under the control of a tissue-specific promoter.

27. (New) The method according to claim 22, wherein said nucleic acid is in the sense orientation and is under the control of a seed-specific promoter.

28. (New) The method according to claim 22, wherein said nucleic acid is in the sense orientation and is under the control of an endosperm-specific promoter such as a prolamin promoter.

29. (New) The method according to claim 22, wherein said nucleic acid is in the sense orientation and is under the control of a weak constitutive promoter such as a maize ubiquitin promoter minus first intron.

30. (New) The method according to claim 22, wherein said nucleic acid is from a monocotyledonous plant from the family Poaceae.

31. (New) The method according to claim 22, wherein said nucleic acid is from a monocotyledonous plant from the family Poaceae and from the genus Oryza.

32. (New) The method according to claim 22, wherein said nucleic acid is represented by SEQ ID NO: 1 or a portion thereof or a sequence capable of hybridizing therewith.

33. (New) Plants obtainable by the method of claim 22, which plants have improved growth characteristics relative to corresponding wild type plants.

34. (New) A method for the production of a monocotyledonous plant having improved growth characteristics, which method comprises the steps of:

- (i) introducing and expressing, in a plant, a nucleic acid encoding an NHX protein or a homologue, derivative or active fragment thereof; and
- (ii) cultivating said plant under non-salt stress conditions.

35. (New) Plants obtainable by the method according to claim 34, which plants have improved growth characteristics relative to corresponding wild type plants, wherein said plants are selected from the group consisting of rice, maize, wheat, barley, millet, rye, oats and sorghum.

36. (New) Transgenic monocotyledonous plants grown under non-salt stress conditions, said plants having improved growth characteristics, and which plants contain an isolated nucleic acid molecule encoding an NHX protein, wherein said transgenic monocotyledonous plants are selected from the group consisting of rice, maize, wheat, barley, millet, rye, oats and sorghum.

37. (New) A plant part, such as a harvestable plant part, a propagule or progeny from a plant, according to claim 35, wherein said plant part is selected from the group consisting of rice, maize, wheat, barley, millet, rye, oats and sorghum.

38. (New) A plant part, such as a harvestable plant part, a propagule or progeny from a plant, according to claim 36, wherein said plant part is selected from the group consisting of rice, maize, wheat, barley, millet, rye, oats and sorghum.

39. (New) Harvestable parts according to claim 32, wherein said harvestable parts are seeds.

40. (New) The plant according to claim 35 selected from sugarcane or a cereal such as rice, maize, wheat, barley, millet, rye, oats and sorghum.

41. (New) The method of claim 22, further comprising administering a genetic construct to the monocotyledonous plant, wherein the genetic construct comprises:

- a) a nucleic acid encoding an NHX protein;
- b) a control sequence capable of regulating expression of the nucleic acid of (a); and optionally,
- c) a transcription termination sequence.

42. (New) The method according to claim 41, wherein said control sequence of (b) comprises a seed-specific promoter.

43. (New) The method according to claim 41, wherein said control sequence of (b) comprises an endosperm-specific promoter.

44. (New) The method according to claim 41, wherein said control sequence of (b), comprises a weak constitutive promoter such as a maize ubiquitin promoter with deleted first intron.

45. (New) The method according to claim 41, wherein said nucleic acid is from a monocotyledonous plant from the family Poaceae.

46. (New) The method according to claim 41, wherein said nucleic acid is from a monocotyledonous plant from the family Poaceae and from the genus Oryza.

47. (New) The method according to claim 41, wherein said nucleic acid is represented by SEQ ID NO: 1 or a portion thereof or a sequence capable of hybridizing therewith.

48. (New) A method for improving the growth characteristics of a monocotyledonous plant grown under non-salt stress conditions, comprising administering a nucleic acid encoding an NHX protein and/or an NHX protein to the monocotyledonous plant.

49. (New) The method according to claim 48, wherein said growth characteristics comprise increased yield/biomass and/or altered architecture.

50. (New) The method according to claim 48, wherein said nucleic acid encodes an NHX1 protein.

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51. (New) A method for breeding monocotyledonous plants in breeding programs grown under non-salt stress conditions, comprising administering a nucleic acid encoding an NHX protein and/or an NHX protein to the monocotyledonous plants.